

### **Remarks**

This Response is provided in response to a final Office Action mailed September 20, 2004. The final Office Action required a restriction under 35 U.S.C. §121 to Group I claims 7-57, and Group II claims 62-72, to which the Examiner withdrew Group I claims 7-57 from consideration; and rejected claims 62-72 under 35 U.S.C. §103(a) as being unpatentable over prior art. Accordingly, the Applicant provisionally elects with traverse Group II claims (claims 62-72) for prosecution on the merits.

To be fully responsive to the Office Action and to promote an expedited examination of the application, the issues raised by the Office Action will now be briefly addressed.

### **Election/Restriction under 35 U.S.C. §121**

The restriction made by the Examiner to Group II of the following claim sets is respectfully traversed. The Examiner states:

- “I. Claims 7-57, drawn to method of generating topological address space map for use in a router, classified in class 709, subclasses 220 and 238.
- II. Claims 62-72, drawn to method of monitoring and analyzing data traffic and using the monitored data to update the routing table, classified in class 709, subclasses 224 and 242.

The inventions are distinct, each from the other because of the following reasons: ...the subcombination I as has separate utility such as monitoring changes in network topology and using detected changes to generate a new/updated routing table. The subcombination II has separate utility such as monitoring data traffic over select links and using monitored data to modify the routing policy.”

However, the Applicant respectfully points out that claims 62-72 are directed to a system for routing network traffic and not to a method of monitoring and analyzing data

traffic. In particular to a system that includes at least: a backbone; a plurality of points of presence on the backbone, wherein each point of presence collects traffic data and sends the traffic data to a network operations center; and a network operations center coupled to the backbone for receiving the traffic data, analyzing the traffic data, and automatically modifying the routing policy of the system based upon the analyzed data. Specifically, claims 7-57 are directed to a method for modifying routing using a topological address space map of a system having a plurality of networks connected to a backbone via a plurality of entry points, and claims 62-72 are directed to the apparatus for the practice of said method.

Under 806.05(e) of the MPEP (Process and Apparatus for Its Practice – Distinctness), process and apparatus for its practice can be shown to be distinct inventions, if either or both of the following can be shown: (1) that the process as claimed can be practiced by another materially different apparatus or by hand, which the Examiner has failed to show; or (2) that the apparatus as claimed can be used to practice another and materially different process, which the Examiner has failed to show.

Because the Examiner has failed to show distinctiveness between the claims of Group I and Group II, the Applicant respectfully requests withdrawal of the restriction requirement, and upon passage to allowance of claims 62-72, the Applicant further respectfully requests, an examination of claims 7-57.

#### **Rejection of Claims Under 35 U.S.C. §103(a)**

The Office Action rejected claims 62-72 under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,178,235 issued to Rene Petersen et al., January 23, 2001 (Petersen '235) in view of United States Patent No. 6,584,093 issued to Hussein Farouk Salama et al., June 24, 2003 (Salama '093). This rejection is respectfully traversed.

A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. (*In re Bell*, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). In

particular, establishing a prima facie case of obviousness requires the satisfaction of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Linter*, 458 F.2d 1013, 173 USPQ 560, 562 (CCPA 1972). Second, the prior art reference (or references when combined), must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Third, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The prior art reference as a whole must not only contain each and every element, but the reference must teach that particular combination of the elements, *In re Mhurkar Patent Litigation*, 28 USPQ2d 1801, 1817 (N.D. Ill. 1993), and "the reason, suggestion, or motivation to combine may be found explicitly or implicitly: 1) in the prior art references themselves; 2) in the knowledge of those of ordinary skill in the art that certain references, or disclosures in those references, are of special interest or importance in the field; or 3) from the nature of the problem to be solved, "leading inventors to look to references relating to possible solutions to that problem." *Pro-Mold & Tool Co. v. Great Lake Plastics, Inc.*, 75 F.3d 1568, 1572, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996) (internal citations omitted); *In re Rouffet*, 149 F.3d at 1357, 47 USPQ2d at 1458. "While the references need not expressly teach that the disclosure contained therein should be combined with another, see *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472, 43 USPQ2d 1481, 1489 (Fed. Cir. 1997), the showing of combinability must be "clear and particular"." *In re Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617." *In Ruiz v. A.B. Chance Co.*, 57 USPQ2d 1161 (CA FC 2000) at 1167.

If the patent examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

### Independent Claim 62

Independent claim 62 is directed to a system for routing network traffic that includes at least: a backbone; a plurality of points of presence on the backbone, wherein each point of presence collects traffic data and sends the traffic data to a network operations center; and a network operations center coupled to the backbone for receiving the traffic data, analyzing the traffic data, and automatically modifying the routing policy of the system based upon the analyzed data.

Petersen '235 fails to teach or suggest a backbone; Petersen '235 teaches a “switching point 12 may be any network node where communications traffic supported by two or more network operators is *routed through* that node...” (col. 4, lines 13-15, emphasis added) a network node is not a backbone. Petersen '235 fails to teach or suggest a plurality of points of presence on the backbone, wherein each point of presence collects traffic data and sends the traffic data to a network operations center.

Rather Petersen '235 teaches that the “Switching point 12 includes a traffic analyzer 14 connected to an incoming traffic controller 16, a router 18, and an outgoing traffic controller 20. Incoming traffic controller 16 receives traffic over three incoming route bundles RBA1, RBB1, and RBC1” (col. 4, lines 34-38). That is, Petersen '235 teaches traffic analysis at a node, and not the collection of traffic data over a plurality of point of presence on the backbone. “Similarly, the outgoing traffic controller 20 detects the amount of traffic being routed out of switching point 12 on route bundles RBA2, RBB2, and RBC2 which correspond to RBA1, RBB1, and RBC1, respectively. In response to a request message from traffic analyzer 14, the outgoing traffic controller 20 responds with a report message providing traffic analyzer 14 with the current amounts of outgoing traffic currently allocated to each outgoing route bundle RBA2, RBB2, and RBC2.” (col. 4, line 66 through col. 5, line 7), again Petersen '235 teaches traffic analysis at a node, and not the collection of traffic data over a plurality of point of presence on the backbone.

Petersen '235 fails to teach or suggest a network operations center coupled to the backbone, Petersen '235 teaches and suggests a “[s]witching point 12 [that] includes a traffic analyzer 14 connected to an incoming traffic controller 16, a router 18, and an outgoing traffic controller 20.” As shown by FIG. 1 of Petersen '235, the traffic analyzer

14, is not coupled with the backbone, rather FIG. 1 shows that the traffic analyzer 14 interacts with the incoming traffic controller 16, the router 18, and the outgoing traffic controller 20. Nothing in Petersen '235 teaches or suggests that the traffic analyzer 14, is not coupled with the backbone. Not only does Petersen '235 as a whole fail to contain each and every element claimed by the Applicant in independent claim 62, Petersen '235 fails to teach the particular combination of the elements as claimed by the Applicant in independent claim 62.

The Examiner states, "When used as a gateway on a backbone, Peterson's traffic analyzer functions as a network operating center for receiving traffic reports from a plurality of points of presence on the backbone that are connected to other partner networks." Simply, Petersen '235 fails to teach or suggest the use of a switching point 12 as a gateway on a backbone, to make such an assertion that Petersen '235 so teaches is conjecture.

Furthermore, there is no limitation that independent claim 62 that requires actual packets of data to pass through the network operating center in order to analyze the traffic data, and automatically modify the routing policy of the system based upon the analyzed data. The switching point 12, Petersen '235, overtly requires passage of data packs through the incoming traffic controller 16, the router 18, and the outgoing traffic controller 20 to analyze traffic for load balancing the router 18. Eliminating the need for the flow of data packets through the switching point 12 to achieve the configuration of the claimed invention renders the invention of Petersen '235 inoperative, thereby making Petersen '235 a non-obvious and inoperative substitute for the present invention.

The Applicant concurs with the Examiner that Petersen '235 fails to teach utilizing an edge/border gateway in a network backbone, and that although Salama '093 does not specifically teach an edge/border gateway, Salama '093 suggests or implies that an edge/border gateway is present. Nonetheless, the teaching or suggestion of an edge/border gateway by Salama '093 does not in and of itself cure all the deficiencies of Petersen '235.

Further, although Salama '093 teaches a backbone, Salama '093 fails to teach or suggest a plurality of points of presence on the backbone, wherein each point of presence collects traffic data and sends the traffic data to a network operations center; and a network

operations center coupled to the backbone for receiving the traffic data, analyzing the traffic data, and automatically modifying the routing policy of the system based upon the analyzed data.

Of equal importance, the Examiner fails to show the combinability Salama '093 with Petersen '235 to arrive at the Applicant's invention to be "clear and particular." Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 62, as well as reconsideration and withdrawal of the rejections to claims 63-72 depending therefrom.

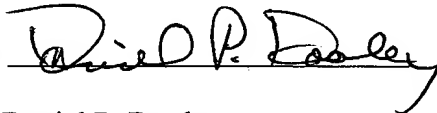
Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 62, as well as reconsideration and withdrawal of the rejections to claims 63-72 depending therefrom.

**Conclusion**

The Applicant respectfully requests reconsideration and allowance of all of the claims pending in the application. This Response is intended to be a complete response to the final Office Action mailed September 20, 2004.

Should any questions arise concerning this response, the Examiner is invited to contact the below listed Attorneys.

Respectfully submitted,

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